ALTERNATIVE B - NEW STORAGE TO IMPROVE DELTA OUTFLOW

Reduce Conflicts in the System

A solution will reduce major conflicts among beneficial users of water. A solution should:

- significantly reduce each of the four major conflicts which have been identified for the Bay-Delta system. Most of the problems in the Bay-Delta are embodied in one or more of these conflicts. They are:

  - fisheries and diversions - **medium/low, export pumping from the South Delta continues and only a moderate level of habitat restoration is included.**

  - habitat and land use/flood protection - **medium, only moderate levels of vulnerability reduction and habitat restoration are included.**

  - water supply availability and beneficial uses - **medium, limited water supply benefits associated with downstream storage without improved trans-Delta conveyance.**

  - water quality and land use - **medium, limited improvement in export water quality since export pumping from South Delta continues, partially offset by extensive pollutant source controls.**

MEDIUM

Equitable

An equitable solution will focus on solving problems in all problem areas. Improvement for some problems will not be made without corresponding improvements for other problems. Equitable considerations include:

- satisfy some portion of each of the 4 primary and 14 secondary objectives which have been identified for the program - **High, addresses some portion of all objectives.**

- provide a reasonable balance of reliability weighted improvements for the four resource areas. Balance does not necessarily require an equal level of improvement for each resource areas (e.g. water exporters might be willing to accept less improvement in water supply reliability if water quality is improved). - **Medium, Storage provides more**

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reliability for protection and increase of fisheries populations and thus increases water supply reliability.

- result in costs allocated to the economic users of water based on the benefits they receive from the solution. However, there is no obligation to provide benefits to those unwilling to contribute towards the solution - **Unable to consider this factor in the absence of a financing plan.**

- result in net benefits and burdens balanced across stakeholder groups - **medium/low Fallowing 400 TAC of land will be perceived as an loss to Agriculture. No other outstanding imbalances.**

MEDIUM

Affordable

An affordable solution will be one that can be implemented and maintained within the foreseeable resources of the Program and stakeholders. An affordable solution should:

- have identifiable revenue and financing provisions which are adequate for implementation and continued maintenance of the solution - **Unable to consider this factor in the absence of a financing plan.**

- be among the least expensive solutions, for a given level of implementation, which achieve the Program objectives - **Low/Medium due to the perceived limited cost-effectiveness of this solution; the new storage, without conveyance, costs a lot while providing only limited water supply benefits. Agriculture alone has a limited ability to pay for the storage.**

- minimize the negative effects on the credit rating of those funding the solution - **Unable to consider this factor in the absence of a financing plan.**

LOW/MEDIUM

Durable

A durable solution will have political and economic staying power and will sustain the resources it was designed to protect and enhance. A durable solution should:

- be adaptive, flexible to changing needs and potential future conditions, and able to

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address biological uncertainty to sustain the resources it was designed to protect and enhance - **Low/medium, this alternative relies primarily on the existence of periods or "windows" during which increased export pumping from the South Delta will be acceptable. This approach is poorly understood, may be incorrect (e.g. the windows may be narrower than expected, or may not exist at all), and is therefore risky. If the anticipated windows do not exist, the storage would provide the flexibility, although limited, to adapt.**

- provide ecosystem improvement using a variety of mechanisms to better face biological uncertainty rather than relying on any single theory of ecosystem improvement - **Medium, this alternative relies on a combination of habitat improvement (moderate) and reoperation (export diversion timing).**

- accommodate hydrological and other physical uncertainties (e.g. increased storage would hedge against the unknown, or consideration of impacts of potentially higher sea levels on the various alternatives could strengthen durability) - **Low/Medium, new storage provides durability in this sense, but continued export diversions from the South Delta are a negative. The continued South Delta export diversions are more suspect to interruption due to higher sea levels (increased flood risk) and additional species listings. The alternative was down graded because a single point of diversion and no conveyance limits flexibility.**

- have adequate legal, operational, or physical provisions to ensure that objectives continue to be met in an equitable way for the long term - **Medium, because the basic conveyance configuration of the Delta is unchanged, existing hydraulic constraints on export diversions remain. Operational guarantees are needed to insure joint sharing of the storage reservoirs between environmental and water supply purposes.**

- include a financial plan which has provisions to ensure that the solution will be implemented as intended, while providing flexibility to alter revenues to respond to changing needs - **Medium/High, because water diverted to the new storage is readily quantifiable and accountable. Long-term contracts for water supply can be developed based on deliveries from storage and use of storage. High cost of storage may influence flexibility to alter revenues.**

MEDIUM

Implementable

An implementable solution will have broad public acceptance, legal feasibility and will be timely and relatively simple to implement compared to other alternatives. An implementable solution

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should:

- have legal or practical precedents or have a clearly identified series of reasonable steps which could be taken to enable implementation - **Medium, relative to the other alternatives, development of new storage and habitat restoration projects is reasonably straightforward, requiring Section 404, NEPA, and CEQA compliance. The mitigation for the reservoir sites and the increased opposition to new storage reduces the practical precedents of new storage.**

- have institutional feasibility - **High, this alternative could be implemented by and within existing institutional authorities. Some contractual or joint powers authorities might be desirable to implement the new storage.**

- include as few major legal and institutional changes as necessary while meeting Program objectives - **High/Medium, this alternative could be implemented by and within existing institutional authorities. Some contractual or joint powers authorities might be desirable to implement the new storage. Water rights change would be needed for increased pumping capacity.**

- have broad acceptance across the various geographic areas and interest groups as well as the state as a whole - **Medium, discounted because this alternative includes substantial amounts of land retirement which is not broadly accepted through the state. Also, depending on the specific reservoir location(s), the new storage included in this alternative would face significant local or regional opposition. There also would be area-of-origin concerns with this alternative.**

MEDIUM/HIGH

No Significant Redirected Impacts

A solution will not solve problems in the Bay-Delta system by redirecting significant negative impacts, when viewed in its entirety, in the Bay-Delta or other regions of California. A solution should:

- minimize negative long-term economic impacts at the regional level - **Medium, relatively small amounts of land-use change compared to other alternatives. However, contains 400 TAC of land retirement which may have long term economic impacts.**

- compensate for or mitigate unavoidable negative impacts to the greatest extent

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practicable - **Medium, 400 TAC would create some redirected impacts.**

MEDIUM

POTENTIAL REVISIONS

Revision	Principle Improved	Rationale	Potential Adverse Affects
Add trans-Delta conveyance improvements	Reduce Conflicts, Affordable	Provides water supply and flood control benefits, improves cost effectiveness of new storage	**Revision**
Upgrade screens at fish facilities at SWP and CVP	Reduce conflicts	Improves fishery protection	Cost
Reduce Land Retirement to the 150 to 200 TAC range	Reduces Conflict, Affordable, Redirected Impacts	Reduces costs and minimizes conflicts with agriculture sector, reduces third party impacts	Reduced environmental water supply for bay
Increase South of Delta Storage to the 1.5 to 2 MAF	Reduces Conflicts, Equitable	Greater water supply benefits, provides more flexibility to reduce conflicts with fishery resources	Site specific impacts, redirected impacts, cost
Remove North of Delta Storage	Reduces Conflicts Reduce Cost	May reduce water quality because of westside Franciscan soils. Can not assume same water quality of Sacramento River	Reduces flexibility to benefit fishery, in stream and delta outflow, reduces the flexibility to increase reliability of Ag and Urban water supplies.

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Relocate, locally a screened intake for SWP and CVP (e.g. to Middle or Old River on San Joaquin)	Reduce Conflicts	Improves fishery protection	Costs

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